

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) In an integrated computer telephony system including a call routing system, a method for routing a call based on the identity of an originating source of said call, comprising:

creating a plurality of routing lists for a user, each of said routing lists being associated with at least one originating source and comprising an ordered list of directory numbers where the user can be reached;

wherein creating said plurality of distinct routing lists comprises:

receiving a first plurality of directory numbers for said user;

receiving a first order for the directory numbers;

creating a first routing list;

receiving a first calling number;

associating the first calling number with the first routing list;

receiving a second plurality of directory numbers for said user;

receiving a second order for the directory numbers;

creating a second routing list;

receiving a second calling number;

associating the second calling number with the second routing list;

receiving said call from an originating source;

identifying said originating source of said call;

selecting a routing list from said plurality of routing lists based on the identity of said

originating source, wherein selecting the routing list comprises matching the identity of the originating source with a calling number associated with one of the plurality of distinct routing lists; and

directing said call sequentially to the directory numbers on said routing list selected.

2. (Previously Presented) The method of claim 1, wherein said selecting a routing list step further comprises:
 - retrieving a default routing list if the identity of the originating source does not match any of the calling numbers associated with the routing lists.
3. (Previously Presented) The method of claim 1, wherein identifying said originating source of said call further comprises:
 - requesting said originating source to provide an identification code; and
 - receiving said identification code.
4. (Previously Presented) The method of claim 1, wherein said integrated computer telephony system provides a calling line identification service and identifying said originating source of said call further comprises:
 - receiving a calling line identification for said originating source; and
 - using the calling line identification to identify the originating source.
5. (Previously Presented) In a program module responsive to receiving communications for a user, a method for routing a communication to said user, comprising:
 - creating a plurality of distinct routing lists for a user, each of said routing lists comprising an ordered list of directory numbers where the user may be reached and being associated with at least one originating source;
 - wherein creating said plurality of distinct routing lists comprises:
 - receiving a first plurality of directory numbers for said user;
 - receiving a first order for the directory numbers;
 - creating a first routing list;
 - receiving a first calling number;
 - associating the first calling number with the first routing list;
 - receiving a second plurality of directory numbers for said user;

receiving a second order for the directory numbers;
creating a second routing list;
receiving a second calling number;
associating the second calling number with the second routing list;
receiving a communication directed to a number from an originating party;
identifying said originating party of said communication;
selecting a routing list from said plurality of routing lists based on the identify of said
originating party, wherein selecting the routing list comprises matching the identify
of the originating party with a directory number associated with one of the plurality
of distinct routing lists; and
directing said communication sequentially to the directory numbers on said routing list.

6. (Previously Presented) The method of claim 5, wherein said selecting a routing list step further comprises:

retrieving a default routing list if the identity of the originating party does not match any of
the calling numbers associated with the routing lists.

7. (Previously Presented) The method of claim 5, wherein identifying said originating party of said communication further comprises:

requesting said originating party to enter an identification code; and
receiving an identification code.

8. (Previously Presented) The method of claim 5, wherein said selecting a routing list step further comprises selecting said routing list from a group of routing lists identified for said originating party based on the day of the week said communication is received.

9. (Previously Presented) The method of claim 5, wherein said selecting a routing list step further comprises selecting said routing list from a group of routing lists identified for said originating party based on the time of day said communication is received.

10. (Previously Presented) The method of claim 5, wherein said selecting a routing list step further comprises selecting said routing list from a group of routing lists identified for said originating party based on the day of the week and the time of the day said communication is received.

11. (Previously Presented) A computer system for routing calls for a user based on the calling line identification of an originating party, comprising:

- a processing unit;

- a memory storage device operative to store a plurality of routing lists for said user by:

 - receiving a first plurality of directory numbers for said user;

 - receiving a first order for the directory numbers;

 - creating a first routing list;

 - receiving a first calling number;

 - associating the first calling number with the first routing list;

 - receiving a second plurality of directory numbers for said user;

 - receiving a second order for the directory numbers;

 - creating a second routing list;

 - receiving a second calling number; and

 - associating the second calling number with the second routing list;

- a receiving interface device coupled to said processing unit for receiving calls;

- a transmitting interface device coupled to said processing unit for placing calls;

- said processing unit being operative to:

 - receiving a call on said receiving interface device from an originating party, said call being directed to said user;

 - detect a calling line identification for said originating party;

retrieve the first routing list associated with the first calling number from said memory storage device if the calling line identification corresponds to said first calling number;
retrieve a default routing list from said memory storage device if the calling number is not associated with one of the routing lists; and
direct said call sequentially to the directory numbers on said retrieved routing list.

12. (Previously Presented) The computer system of claim 11, wherein said processing unit directs said call sequentially to the directory numbers on said retrieved routing list by:

- (a) selecting a first directory number from said routing list;
- (b) routing said call to said first directory number;
- (c) receiving communication disposition information from said first directory number; and
- (d) if said communication disposition indicates said retrieved routing step failed, selecting a next directory number from said routing list and repeating steps (b)-(d) at said next directory number.

13. (Previously Presented) A computer-readable medium on which is stored a computer program for selecting a routing list and directing a call based on an identifying criteria, and a data file containing a plurality of routing lists for a called party, wherein each of said routing lists comprises a plurality of directory numbers where a user can be reached, said directory numbers being in an order determined by the user, said computer program comprising instructions which, when executed by a computer, perform the steps of:

creating a plurality of distinct routing lists for a user, each of said routing lists comprising an ordered list of directory numbers where the user can be reached and being associated with at least one originating source;

wherein creating said plurality of distinct routing lists comprises:

- receiving a first plurality of directory numbers for said user;
- receiving a first order for the directory numbers;

creating a first routing list;
receiving a first calling number;
associating the first calling number with the first routing list;
receiving a second plurality of directory numbers for said user;
receiving a second order for the directory numbers;
creating a second routing list;
receiving a second calling number; and
associating the second calling number with the second routing list;
receiving a communication for said called party;
obtaining said identifying criteria from said communication;
retrieving a routing list from said data file based on said identifying criteria; and
directing said communication sequentially to the directory numbers listed on said routing list.

14. (Previously Presented) The computer-readable medium recited in claim 13, wherein said identifying criteria comprises a calling line identification message and said step of obtaining an identifying criteria further comprises receiving said calling line identification message.

15. (Previously Presented) The computer-readable medium recited in claim 13, wherein said identifying criteria comprises a dual tone multi-frequency code sequence and said step of obtaining an identifying criteria further comprises detecting said dual tone multi-frequency code sequences.

16. (Previously Presented) The computer-readable medium recited in claim 13, wherein said identifying criteria comprises a dual tone multi-frequency code sequence and said step of obtaining identifying criteria further comprises the steps of:
providing keypad menu selection options to said called party; and
receiving a dual tone multi-frequency signal corresponding to a keypad menu selection from said called party.

17. (Previously Presented) The method of claim 1, wherein identifying said originating source of said call further comprises:

requesting said originating source to provide a speech sample; and
receiving said speech sample.

18. (Previously Presented) the method of claim 5, wherein identifying said originating party of said communications further comprises:

requesting said originating party to enter a speech sample; and
receiving said speech sample.

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Previously Presented) The method of claim 1, wherein said selecting a routing list step further comprises selecting said routing list based on the day of the week said communication is received.

23. (Previously Presented) The method of claim 1, wherein said selecting a routing list step further comprises selecting said routing list based on the time of day said communication is received.

24. (Previously Presented) The method of claim 1, wherein said selecting a routing list step further comprises selecting said routing list based on the day of the week and the time of the day said communication is received.

25. (Previously Presented) The method of claim 1, wherein said selecting a routing list step further comprises the steps of:

- detecting an area code associated with said originating source;
- retrieving an associated routing list for said originating source based on the area code; and
- retrieving a default routing list if said associating routing list does not exist.

26. (Previously Presented) The method of claim 1, wherein said selecting a routing list step further comprises the steps of:

- detecting an exchange associated with said originating source;
- retrieving an associated routing list for said originating source based on said exchange; and
- retrieving a default routing list if said associated routing list does not exist.

27. (Canceled)

28. (Currently Amended) In an integrated computer telephony system including a call routing system, a method for routing a call, the method comprising the steps of:

- maintaining a plurality of routing lists for a user, each of the routing lists being associated with at least one originating source and comprising an ordered list of directory numbers where the user can be reached;
- receiving a call from an originating source;
- requesting that the originating source provide identifying information;
- receiving from the originating source identifying information;
- selecting a particular routing list from the plurality of routing lists based at least in part upon the received identifying information; and
- directing the call sequentially to the directory numbers on the particular routing list.

29. (Previously Presented) In an integrated computer telephony system including a call routing system, a method for routing a call, the method comprising the steps of:

- maintaining a plurality of routing lists for a user of a private branch exchange coupled to a public switched telephone network, each of the routing lists being associated with at least one originating source and comprising an ordered list of directory numbers where the user can be reached;
- receiving a call from an originating source;
- determining whether the call is external or internal to the private branch exchange;
- selecting a particular routing list from the plurality of routing lists based at least in part upon the determination of whether the call is external or internal to the private branch exchange; and
- directing the call sequentially to the directory numbers on the particular routing list.

30. (Previously Presented) In an integrated computer telephony system including a call routing system, a method for routing a call, the method comprising the steps of:

- maintaining a plurality of routing lists for a user, each of the routing lists being associated with at least one originating source and comprising an ordered list of directory numbers where the user can be reached;
- receiving a call from an originating source;
- determining whether the call requires special processing;
- responsive to determining the call does not require special processing, further including the steps of:
 - providing the originating source with keypad menu selection options;
 - receiving from the originating source a dual tone multi-frequency signal corresponding to a keypad menu selection;
 - selecting a particular routing list from the plurality of routing lists based at least in part upon the received signal; and
 - directing the call sequentially to the directory numbers on the particular routing list.

31. (Previously Presented) In an integrated computer telephony system including a call routing system, a method for routing a call based on the identity of an originating source of said call, comprising the steps of:

maintaining a plurality of routing lists, each of said routing lists being associated with at least one originating source and each routing list comprising a plurality of directory numbers;

receiving said call from said originating source;

selecting a routing list associated with said originating source from said plurality of routing lists; and

directing said call sequentially to the directory numbers on said routing list.

32. (Previously Presented) In an integrated computer telephony system including a call routing system, a method for routing a call, comprising the steps of:

maintaining a plurality of routing lists, each routing list comprising a plurality of directory numbers;

receiving the call from an originating source;

receiving identifying criteria;

using the identifying criteria to determine whether a first routing lists exists, wherein the

first routing list is associated with the originating source by the identifying criteria;

responsive to determining the first routing list exists, further including the steps of:

(a) retrieving the first routing list;

(b) directing the call to one of the directory numbers on the first routing list;

(c) determining whether the call was connected;

(d) responsive to the call not being connected, determining whether the call has been directed to each directory number on the first routing list;

(e) responsive to determining both that the call has not been connected and that the call has not been directed to each directory number on first routing list, repeating steps (b), (c), and (d);

- (f) responsive to determining both that the call has not been connected and that the call has been directed to each directory number on first routing list, retrieving a second routing list, the second routing list being a default routing list;
 - (h) responsive to determining both that the call has not been connected and that the call has been directed to each directory number on first routing list, directing the call to one of the directory numbers on the default routing list;
 - (i) responsive to determining both that the call has not been connected and that the call has been directed to each directory number on first routing list, determining whether the call was connected;
 - (j) responsive to determining both that the call has not been connected and that the call has been directed to each directory number on first routing list and responsive to the call not being connected, repeating steps (h), and (i);
- responsive to determining the first routing list does not exist, further including the steps of:
- (k) retrieving the default routing list;
 - (l) directing the call to one of the directory numbers on the default routing list;
 - (m) determining whether the call was connected; and
 - (n) responsive to the call not being connected, repeating steps (l), and (m).

33. (New) A system for routing a communication to a user, comprising:
- a receiving element configured to receive a first communication directed to a number assigned to the user;
 - a routing element communicatively coupled to the receiver, the routing element configured to access communication routing information in response to the first communication, the communication routing information including a list of destinations on a public switched telephone network, the list of destinations comprising a plurality of the destinations hierarchically arranged in order of user preference for communication routing, the routing element further configured to select a first destination on the list of destinations;
 - a transmitting element communicatively coupled to the routing element, the transmitting element configured to place a further communication to the destination, the further communication including an indication of the receipt of the first communication upon its arrival at the destination;
 - a receiving element configured to receive communication disposition information from the destination; and
 - a routing element configured to dispose of the first communication in accordance with the communication disposition information by either routing the first communication to the first destination or by selecting the next hierarchically arranged destination on the list of destinations.
34. (New) The system of claim 33, wherein the list of destinations comprises:
- a list of devices having at least two calling line numbers, the devices comprising at least one of the following: telephones, mobile phones, cellular phones, voice mail systems, facsimile devices, and paging devices.

35. (New) The system of claim 33, wherein the list of destinations comprises a first hierarchical list and a second hierarchical list, the first hierarchical list having destinations hierarchically arranged in order of user preference for communication routing during a first period of time, the second hierarchical list having destinations hierarchically arranged in order of user preference for communication routing during a second period of time.

36. (New) The system of claim 35, wherein the first period of time is a first portion of a twenty-four hour period and the second period of time is a second portion of the twenty-four hour period.

37. (New) The system of claim 35, wherein the first period of time is a first portion of a week and the second period of time is a second portion of the week.

38. (New) The system of claim 33, wherein the communication routing information further comprises:

an override destination,

wherein the routing element is further configured:

to select the first destination on the list of the destinations to determine if a priority override is established;

if the priority override is established, then to determine whether the source of the communication is a priority caller; and

if the source is a priority caller, then to select and route the communication to the override destination.

39. (New) The system of claim 38, wherein the communication routing information further comprises a default destination, wherein the routing element is further configured to select and route the communication to the default destination if the source is not a priority caller.

40. (New) The system of claim 39, wherein the user has a voice mail service, and wherein the default destination comprises the voice mail service.
41. (New) The system of claim 34, wherein the routing element is further configured:
to access the communication routing information in response to receiving a call on a calling line from the user; and
to substitute a new destination for a destination in the list of destinations.
42. (New) The system of claim 41, wherein the routing element is further configured to request the new destination from the user.
43. (New) The system of claim 41, wherein the routing element is further configured to:
identify the calling line number associated with the calling line; and
confirm the calling line number as the new destination with the user.
44. (New) The system of claim 41, wherein the routing element is further configured to substitute an override destination for the destination in the list of destinations.
45. (New) The system of claim 44, wherein the first destination comprises the override destination.
46. (New) The system of claim 44, wherein the routing element is further configured:
to determine whether the source of the communication is a priority caller, and
if the source is a priority caller, then to select the override destination as the destination.
47. (New) The system of claim 46, wherein the routing element is further configured to then select a default destination for routing the communication if the source is not a priority caller.

48. (New) The system of claim 33, wherein the communication is initiated by a source, and the routing element is further configured to identify the source of the communication.

49. (New) The system of claim 48, wherein the indication of the receipt comprises the identity of the source.

50. (New) The system of claim 48, wherein the routing element is further configured to request a confirmation of the identity from the source.

51. (New) The system of claim 48, wherein the routing element is further configured to:
identify the calling line number associated with the source of the communication; and
determine the identity for the source by accessing a database to find a database entry
corresponding to the calling line number.

52. (New) The system of claim 51, wherein the indication of the receipt comprises an indication of the identity obtained from the database.

53. (New) The system of claim 51, wherein the database comprises a user personalized database having entries of priority callers, and wherein the routing element is further configured to access the user personalized database to find a priority caller entry corresponding to the calling line number.

54. (New) The system of claim 53, wherein the indication of the receipt comprises the identity obtained from the user personalized database.

55. (New) The system of claim 53, wherein the indication of the receipt comprises:
an indication of the receipt of a priority call; and
an indication of the identity obtained from the user personalized database.

56. (New) The system of claim 53, wherein the routing element is further configured to request from the source a confirmation of the identity obtained from the user personalized database.

57. (New) The system of claim 33, wherein the routing element is further configured: to check the communication routing information for a mobile telephone destination; to check for a powered-on indication of the mobile telephone destination if the mobile telephone destination is present in the communication routing information; and to select the mobile telephone destination as the first destination if the mobile telephone destination provides the powered-on indication.

58. (New) The system of claim 33, wherein the routing element is further configured to request the communication disposition information before the routing element receives the communication disposition information.

59. (New) The system of claim 33, wherein the communication disposition information comprises an acceptance of the communication, and wherein the routing element receives the acceptance.

60. (New) The system of claim 59, wherein the communication disposition information comprises a rejection of the communication, and wherein the receiver receives the rejection.

61. (New) The system of claim 60, wherein the rejection comprises a failure to receive the acceptance.

62. (New) The system of claim 33, wherein the communication disposition information comprises an acceptance of the communication, and wherein the routing element is further configured to route the communication to the destination.

63. (New) The system of claim 33, wherein the communication disposition information comprises a rejection of the communication, and wherein the routing element is further configured to route the communication to a default destination.

64. (New) The system of claim 63, wherein the default destination comprises a voice mail service and wherein the routing element is further configured to route the communication to the mail service.

65. (New) The system of claim 63, wherein the rejection comprises a failure to receive an acceptance of the communication, and wherein the routing element is further configured to route the communication to a second destination.

66. (New) The system of claim 63, wherein the rejection comprises a failure to receive an acceptance of the communication, and wherein the routing element is further configured to route the communication to a default destination.

67. (New) The system of claim 33, wherein the communication disposition information comprises a rejection of the communication, and wherein the routing element is further configured to:

- select a second destination for routing the communication;
- indicate the receipt of the communication at the second destination;
- receive second communication disposition information; and
- dispose of the communication in accordance with the second communication disposition information.

68. (New) The system of claim 33, wherein the communication directed to the number is received and routed by a service circuit node according to the list of destinations.

69. (New) The system of claim 33, wherein the source of the communication hears ringing tones when the receipt of the communication at the destination is indicated.
70. (New) The system of claim 33, wherein if the communication is not routed to the first destination on the list of destinations, the source of the communication is informed that another destination is being contacted.
71. (New) The system of claim 33, wherein the user can modify the order of the hierarchically arranged destinations.